

The influence of the sun is necessary, and the squalls disappear as soon as the sun has set as a rule. Squalls do not obtain when a uniform sheet of stratus covers the sky.

The charts given show typical instances when snow squalls were general over Michigan, and a marked similarity will be noticed in the trend of the isobaric lines, and squalls will occur whenever there is a similar distribution of pressure with lines running north-south. In looking over the old records of Michigan weather these squalls were noted all through the history of past conditions, and in many instances the winds were termed dangerously strong and the snow as very thick.

Not only does the rather round low pressure area with lines running roughly north-south produce snow squalls in the fall, winter and spring, but it causes clearing weather to be delayed from 12 hours to several days after the pressure has begun to rise. Precipitation, either as a steady fall or in the form of sun showers, is the usual thing, and it is most exasperating to forecasters as well as to the public. Rising pressure which would be certain fair weather anywhere away from the water is just the opposite in the Lake Region.

The anticyclones of December, 1928.—Two of the anticyclones of this month call for special note, the first was centered over the Lander (Wyo.) station, from the 4th to the 10th, both inclusive. It was doubtless formed originally by a flow of polar air on the 3d and 4th. Thereafter it was maintained largely by intense terrestrial radiation and the drainage of cold air into the depression in which the Lander station is situated. Two secondary anticyclones were discharged from this anticyclone, the first on the 5th, and this one was doubtless a result of the eastward flow of a part of the original mass of polar air. The second one was pinched off on the 7th when a ridge of cold air over western Nebraska and Kansas became separated from the original mass.

The Great Basin anticyclone discharged but a single secondary; the latter took a course to the southeastward over New Mexico and moved thence to the Atlantic. Pressure in all of the secondaries diminished as they crossed the Mississippi Valley and again increased where they crossed the Appalachians, although in no case could they be considered as being composed of polar air.—A. J. H.

BIBLIOGRAPHY

C. FITZHUGH TALMAN, in Charge of Library

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